

**City of Ottawa**

**Draft 2026 Amendment to Stormwater Management**

**Development Charges Background Study:**

**Shirley's Brook (SWM Area W-2)**

**March 17, 2026**

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## **EXECUTIVE SUMMARY**

### **A. 2026 SWM Area W-2**

The development charge rates listed within this study are intended to update the assumptions included in the City's 2024 SWM Provisional Development Charges Background Study (2024 SWM Study). The review presented in this amendment, undertaken in advance of the legislative requirement to update DC By-laws every 10 years, involves the existing development-related costs and remaining growth forecast for Shirley's Brook Stormwater Management Area (SWM Area W-2). The underlying calculation methodology used to establish the revised development charges are similar to the approaches presented in previous studies.

According to the current Area-Specific Development Charge (ASDC) for all the stormwater works within SWM Area W-2, the previous schedules no longer capture interest relating to the construction of existing stormwater works dating back to two front-ending reports approved in 2006 and 2009 by City Council. As part of the 2026 amendment for SWM Area W-2, the development projections have also been revised, which has resulted in adjustments to the residential and non-residential cost allocations. The recoverable capital cost estimates still align with the analysis included in the previous reports and studies.

### **B. Calculated SWM Area W-2 Rates**

A summary of the proposed residential and non-residential SWM Area W-2 rates by development type is shown below.

<b>Shirley's Brook (SWM Area W-2)</b>				
<b>Stormwater Management Facility</b>	<b>Single &amp; Semi-Detached + Duplex Dwelling</b>	<b>Multiple, Row &amp; Mobile Dwelling</b>	<b>Stacked Row &amp; Apartment Dwelling</b>	<b>Non-Residential per Floor Area</b>
<b>Proposed Rates</b>	<b>\$3,814</b>	<b>\$2,831</b>	<b>\$688</b>	<b>\$2.08</b>

### **C. Policy Considerations**

#### **1. Consideration of Area Rating**

As required by the *Development Charges Act (DCA)*, consideration was given to the use of area rating. In line with the City's historical practice, the infrastructure identified for the various existing SWM areas is deemed to provide a localized benefit and is therefore recovered on an area-specific basis.

#### **2. Local Service Guidelines**

The City has Local Service Guidelines related to SWM infrastructure. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the DC calculation for the City of Ottawa. Functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer.

#### **3. Draft SWM Area W-2 DC By-law**

The draft SWM Area W-2 DC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*.

#### **D. Cost of Growth Analysis**

Long-term operating impacts and asset management requirements have been examined as part of this analysis. It is not expected that the City will incur increased operating costs as additional infrastructure has already been constructed. It is also recognized that the increase in rate funding associated with new development is anticipated to partially or fully offset the costs previously identified.

The calculated provisions identified are financially sustainable, as it continues to be expected that the increased capital asset management requirements can be absorbed by the rate base over the long term.

Importantly, the City's ongoing review of asset management policies and long-range financial planning analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

#### **E. Consultation on 2026 SWM Area W-2 DC Study**

Following the release of the revised DC Study for SWM Area W-2, a formal statutory public meeting as required by the *DCA* will take place. Any person who attends the statutory public meeting may make representations related to the proposed by-law.

### **I INTRODUCTION**

#### **A. Background**

Starting in 2004, the City established ASDCs for stormwater management ponds and drainage infrastructure where the costs are more localized and do not benefit development external to the drainage area. For stormwater management infrastructure that is intended to meet the increase in need for service arising from development on a broader basis (e.g., city-wide or large area), a city-wide development charge is calculated.

The City passed and enacted the current area-specific SWM DC by-law 2024-229 on May 15th, 2024. This supported the ongoing payback from all benefiting owners when they continue to develop their land holdings.

The City's Area-specific SWM Development Charge Background Study of June 28, 2004, described a benefitting area for the Shirley's Brook SWM Area W-2 and Council approved a set of rates in DC By-Law 2004-308, on July 14, 2004. Three stormwater management facilities and stream rehabilitation works for the land near March Road were included in this by-law.

The Shirley's Brook Stormwater Facilities are located within the South March Community in lands bounded by March Road to the west, Klondike Road to the south, March Valley Road to the east and the upper limit of the Urban Boundary as designated in the Council Approved Official Plan. The lands are referred to as the Kanata North Urban Expansion Area and were brought into the urban area by Regional Official Plan Amendment No. 28. A Concept Plan and an associated Master Drainage Plan were completed in support of the expansion area. In 1999, the Shirley's Brook/Watts Creek Subwatershed Study was completed and recommended an integrated management approach to development with the Shirley's Brook subwatershed. Subsequently, in 2001, the Kanata North Environmental Stormwater Management Plan was completed to compliment the previous subwatershed study.

Two Shirley's Brook SWM growth-related capital projects were approved and front-ended as *DCA*-Stormwater Management Ponds East 1 and 2, including Stream Rehabilitation in 2006 and the *DCA*-Stormwater Management Pond West 1 in 2009. Both front enders share in the distribution of SWM development charge revenues that have been and will be collected within the existing benefitting area.

The recalculation of the SWM Area W-2 rates is based on updates and adjustments to the estimated on-going development-related calculation requirements.

**B. New Rates Have Been Calculated for SWM Area W-2**

Following the enactment of the SWM DC By-laws as part of the City's 2024 DC Study update, comments from stakeholders were received in relation to enacted rates for SWM Area W-2. Upon further review by City staff, it was determined that adjustments to certain project costs would be brought forward. As part of this study the development forecast has also been revised to reflect updated information resulting in revisions to the residential and non-residential allocation of costs.

**C. Study Structure**

This study includes a summary of the detailed calculation inputs used to arrive at the SWM Area W-2 DC rates. An overview of the tables included in this study is provided below:

**Table 1: Projected Growth to Build-Out (Development Forecast)**

Table 1 provides a summary of the residential and non-residential development remaining forecast in SWM Area W-2. The forecast identifies the total net developable land area as well as the anticipated residential dwelling unit mix and non-residential gross-floor area (GFA) by sector (e.g., industrial, commercial, and institutional).

Overall, the City will continue collection of ASDCs from all eligible properties within the benefiting area to ensure the costs associated with these capital investments are fully funded by development charge revenues when future growth occurs.

**Table 2: Development-Related Capital Program**

Table 2 identifies the recoverable capital costs required to service development occurring within SWM Area W-2 over the planning period. The table provides a description of eligible development charge

recoverable costs (*excluding annual indexing of outstanding amounts based on the annual DC price index*), available reserve fund balance or ineligible costs not included in the calculation and any post-period benefit.

### **Table 3: Summary of Unadjusted Residential and Non-Residential Development Charges**

Table 3 summarizes the residential and non-residential development charge calculations. The process used to calculate the SWM Area W-2 rates is the same as the 2024 SWM DC Study whereby the residential and non-residential cost allocations are based on the remaining net developable land. Furthermore, allocation of costs between the various residential unit types (e.g., single and semi-detached, row/townhome and stacked row/apartments) are based on the total amount of unbuilt hectares and the related run-off coefficient.

Similar to the approach employed in the 2024 SWM DC Study, the non-residential charge is calculated on a uniform basis per square foot of gross floor area.

#### **Map of Benefitting Area**

A map of SWM Area W-2 benefitting area has been provided. The map will also be included in the revised DC By-law.



## II SWM CALCULATION METHODOLOGY

The overall approach utilized in the SWM Area W-2 2026 update has remained unchanged from the City's past development charge processes. The calculation methodology presented in this DC Study is compatible with the requirements of the *DCA*.

### A. Development Forecast

The *DCA* requires that a development forecast be prepared, which identifies the anticipated amount, type, and location of development. In line with historical practice, the development forecast for this SWM area is based on the potential development from the end of 2025 to build-out. Consistent with

historical practice, the development forecast identifies the amount of net developable land area and related residential (number of dwelling units) and non-residential (gross floor area) growth potential over the planning period.

Following the release of the 2024 SWM DC Study dated March 15, 2024, and the subsequent passing of the 2024 SWM DC By-law, the development forecast has been reviewed and updated. The new forecast lists the total residential net developable land area at 7.48 (Net HA) and non-residential at 4.90 (Net HA) for a remaining total of 12.38 (Net HA). A revised development forecast for this amendment has been prepared and is shown as Table 1.

TABLE 1  
CITY OF OTTAWA  
STORMWATER MANAGEMENT POND/DRAINAGE SYSTEM  
SHIRLEY'S BROOK (AREA W-2)  
PROJECTED GROWTH

Development Type	Current	Projected Growth	Total Build-out
<b>Residential Units</b>			
Single Detached	256	0	256
Semi-Detached	63	12	75
Row/Town	693	144	837
Stacked Row	59	91	150
Apartment	63	249	116
<b>Total</b>	<b>1,134</b>	<b>496</b>	<b>1,434</b>
<b>Developed Residential Land Area (Net HA)</b>			
Single Detached	11.60	0.00	11.60
Semi-Detached	1.80	0.60	2.40
Row/Town	15.80	4.58	20.38
Stacked Row	0.80	1.52	2.32
Apartment	0.50	0.78	1.28
<b>Total</b>	<b>30.50</b>	<b>7.48</b>	<b>37.98</b>
<b>Developed Non-Residential Land Area (Net HA)</b>			
Industrial	0.00	3.70	3.70
Commercial	0.82	1.20	2.02
Institutional	1.10	0.00	1.10
<b>Total</b>	<b>1.92</b>	<b>4.90</b>	<b>6.82</b>
<b>Non-Residential Employment</b>			
Industrial	0	183	183
Commercial	62	93	155
Institutional	17	0	17
<b>Total</b>	<b>79</b>	<b>276</b>	<b>355</b>
<b>Non-Residential GFA (sq. ft.)</b>			
Industrial	0	181,170	181,170
Commercial	4,092	35,805	39,897
Institutional	7,011	0	7,011
<b>Total</b>	<b>11,103</b>	<b>216,975</b>	<b>228,078</b>

	Net Ha	Allocation
<b>Residential</b>	7.48	60%
<b>Non-Residential</b>	4.90	40%
<b>Total</b>	<b>12.38</b>	<b>100%</b>

## **B. Development-related Capital Program**

The development-related capital program includes pond and drainage infrastructure for the SWM W-2 benefiting area. The remaining expenditure forecast is a point-in-time analysis and may be subject to ongoing revisions.

### **1. Identification of Capital Costs**

The remaining capital costs identified align with the 2024 SWM DC Study dated March 15, 2024, and have been adjusted to reflect interest incurred to date.

Based on the current average cost calculations, the existing growth-related infrastructure is anticipated to provide services to development occurring over the planning period to build-out. A cash-flow model, which factors in the anticipated timing of expenditures, inflation, interest earnings, and long-term debt has not been used as the calculation methodology.

As a result, net financing costs and any potential future indexing of outstanding amounts have not been incorporated in the calculation of the charges given the variability that exists in terms of when anticipated development will occur over the remaining planning period.

### **2. Deductions for Ineligible Costs**

In accordance with the requirements of the *DCA*, deductions have been made to the identified gross capital project costs. This includes adjustments for capital grants, subsidies, or other contributions as required by the *DCA* (s. 5. (2)) and the portion of projects that confer benefits to existing (BTE) residents (s.5.(1)6). These portions of projects and their associated net costs are the funding responsibility of the City. The required contribution for non-growth shares of projects was identified as part of the

preparation of the original 2004 development-related capital forecast. These deductions, if applicable, are shown in Table 2.

### **3. Adjustments for Uncommitted Excess Capacity**

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Such capacity is used to partially meet the future servicing requirements. The original individual projects identified in the capital program are related to the increase in need for servicing arising from development occurring within the benefiting area. As such, no uncommitted excess capacity has been identified for SWM Area W-2.

### **4. Adjustments for Prior Growth**

Consistent with the City’s historical practice, a reserve fund balance has been incorporated into the rate calculation. The negative development charge reserve fund balance of \$1,137,564 for SWM Area W-2 has been deemed to be committed excess capacity and has been included in the calculation.

## **C. Attribution to Types of Development**

The next step in the determination of the SWM is the allocation of remaining development-related net eligible capital costs between the residential and non-residential sectors. Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by each sector.

In accordance with the City’s historical approach the SWM Area W-2 development charges calculation, total residential and non-residential land area was used to determine the apportionment of costs between residential and non-residential development. For the purposes of SWM infrastructure, this is a reasonable approach to base the allocation of costs between benefiting sectors.

## **D. Calculation of Development Charges**

## **1. Residential Share**

In accordance with the methodology used in past studies, the residential development charges are calculated based on the run-off coefficient specific to each type of unit (e.g., single-detached and semi-detached, row/town and stacked row/apartment). The run-off coefficients are based on the City of Ottawa Sewer Design Guidelines.

The residential development charges are calculated by multiplying the unbuilt land area associated with residential development by the corresponding run-off coefficient. The costs attributed to each type of development is then divided by the remaining units to be constructed over the identified planning period (2026 to build-out). Residential development charges are calculated based on the following dwelling units:

- Single Detached and Semi-Detached;
- Row/Town; and
- Stacked Row/Apartment.

## **2. Non-Residential Share**

The non-residential development charge continues to be calculated on a uniform development type basis. The charge is established by dividing the applicable non-residential costs by the total amount of gross floor area identified over the planning period (2026 to build-out).

### **III SUMMARY OF CAPITAL COSTS AND CALCULATED DEVELOPMENT CHARGE RATES**

#### **A. Summary of DC Eligible and Ineligible Costs**

Table 2 below provides a summary of the DC eligible and ineligible costs for SWM Area W-2 and the residential and non-residential cost allocations.

As shown, the only remaining DC recoverable cost relates to the recovery of the committed negative reserve fund balance. This balance will be recovered from the remaining residential and non-residential development occurring in SWM Area W-2.

## B. 2026 Calculated SWM Area W-2 Rates

Table 3 provides a summary of the calculated residential and non-residential SWM rates by benefiting area.

For example, the calculated residential development charges for residential dwelling units amount to \$3,814 per single and semi-detached dwelling unit and the non-residential rates have been calculated on a uniform basis at \$2.08 per square foot.

**TABLE 2**  
**STORMWATER MANAGEMENT POND/DRAINAGE SYSTEM**  
**SHIRLEY'S BROOK (SWM AREA W-2)**  
**DEVELOPMENT-RELATED CAPITAL PROGRAM**

Item No.	Project Description	DC Recoverable Costs	Replacement & BTE Shares		Prior Growth	DC Eligible Costs	Post-Period Benefit
			%	\$			
252	Reserve Fund Balance - Committed <sup>1</sup>	\$ 1,137,564	0%	\$ -	\$ -	\$ 1,137,564	\$ -
<b>TOTAL SHIRLEY'S BROOK (AREA W-2)</b>		<b>\$ 1,137,564</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,137,564</b>	<b>\$ -</b>

Residential Share of DC Eligible Cost	60%	\$ 687,316
Non-Residential Share of DC Eligible Cost	40%	\$ 450,247

Outstanding Available Capital Project Funding	\$ 1,256,397
Cash Balance (Surplus) Uncommitted	\$ (118,833)
<b>Total Balance (Negative)<sup>1</sup></b>	<b>\$ 1,137,564</b>

TABLE 3

**STORMWATER MANAGEMENT POND/DRAINAGE SYSTEM  
SHIRLEY'S BROOK (SWM AREA W-2)  
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES**

Net Residential Cost	\$ 687,316
Net Non-Residential Cost	\$ 450,247

RESIDENTIAL SHARE								
Development Type	Unbuilt Hectares	Run-off Coefficient	Hectares x Coefficient	% of Total	Net Cost	Remaining Units	Calculated Rates per Unit	Current Rates per Unit
Single Detached	-	0.6	-	0%	\$ -	-	\$ 3,814	\$ 2,435
Semi-Detached	0.60	0.6	0.4	7%	\$ 45,770	12	\$ 2,831	\$ 2,210
Row/Town	4.58	0.7	3.2	59%	\$ 407,609	144	\$ 688	\$ 1,457
Stacked Row	1.52	0.8	1.2	22%	\$ 154,602	91		
Apartment	0.78	0.8	0.6	12%	\$ 79,335	249		
<b>TOTAL</b>	<b>7.48</b>		<b>5.4</b>	<b>100%</b>	<b>\$ 687,316</b>	<b>496</b>		

NON-RESIDENTIAL SHARE				
Development Type	Net Cost	Remaining GFA (sq. ft.)	Calculated Rates per Sq. Ft.	Current Rates per Sq. Ft.
Non-Residential	\$ 450,247	216,975	\$ 2.08	\$ 2.14

**C. Comparison of Current vs. Calculated Area-Specific SWM Rates**

Table 4 provides a comparison of the calculated residential and non-residential rates compared to the rates drafted under the 2026 SWM Area W-2 update, and the current rates implemented as part of the 2024 SWM Area W-2 DC By-law, indexed to current dollars. As stated in Section I of this report, the proposed rates for SWM Area W-2 reflect better information related to the development cost assumptions.

As shown, the proposed residential rates represent an increase from the current SWM Area W-2 rates. For example, the proposed rate of \$3,814 per single and semi-detached unit represents an increase of \$1,379 over the current enacted rate of \$2,435 per unit.

For the non-residential rates, the proposed rate of \$2.08 per square foot represents a decrease of \$0.06 per square foot from the current calculated rate.

**TABLE 4**

**STORMWATER MANAGEMENT POND/DRAINAGE SYSTEM  
Shirley’s Brook (SWM AREA W-2)  
COMPARISON OF PROPOSED AND CURRENT RESIDENTIAL AND NON-RESIDENTIAL  
DEVELOPMENT CHARGE RATES**

<b>Shirley’s Brook (SWM Area W-2)</b>				
<b>Stormwater Management Facility</b>	<b>Single &amp; Semi-Detached + Duplex Dwelling</b>	<b>Multiple, Row &amp; Mobile Dwelling</b>	<b>Stacked Row &amp; Apartment Dwelling</b>	<b>Non-Residential per Floor Area</b>
<b>Current Rates</b>	<b>\$2,435</b>	<b>\$2,210</b>	<b>\$1,457</b>	<b>\$2.14</b>
<b>Proposed Rates</b>	<b>\$3,814</b>	<b>\$2,831</b>	<b>\$688</b>	<b>\$2.08</b>

## **IV DEVELOPMENT CHARGE POLICY CONSIDERATIONS**

### **A. Consideration of Area Rating**

As required by the *DCA*, consideration was given to the use of area rating. Consistent with the City's historical practice, the infrastructure identified for various SWM areas is deemed to provide a localized benefit and is therefore recovered for on an area-specific basis. This practice is aligning with the charges calculated for SWM Area W-2.

For stormwater management infrastructure that is intended to meet the increase in need for service arising from development on a broader basis (e.g., city-wide or large area), a city-wide development charge is calculated.

### **B. Local Service Guidelines**

The City also has Local Service Guidelines related to SWM infrastructure. The purpose of establishing these definitions is to determine the growth-related capital costs for inclusion in the development charges calculation for the City of Ottawa. Functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. Local Service Guidelines for SWM infrastructure is based on the City's prevailing practices.

### **C. Draft SWM Area W-2 DC By-law**

The draft SWM Area W-2 DC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*. Once the City carries out the public process and passes a new by-law, the emphasis shifts to implementation matters. These include notice of passage, potential appeals, complaints, front-end agreements, subdivision agreement conditions and finally the collection of SWM revenues and the funding of growth-related recoverable costs.

## **V COST OF GROWTH ANALYSIS**

This section provides an examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the By-law. This examination is required as one of the provisions of the *DCA*.

### **A. Asset Management Plan Requirements**

The *DCA* now requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the By-law are financially sustainable over their full life cycle.

#### **1. Calculated Annual Provision**

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions from the required annual capital provision. In calculating the annual provisions, several assumptions are made to account for inflation and interest.

#### **2. Assets are Deemed to be Financially Sustainable**

The City has internal asset management policies and practices which are supported through the City's Comprehensive AMP, long range financial plan and annual budgeting exercises.

The assets identified in this Study have already been deemed to be financially sustainable. The increased capital asset management requirements have been absorbed by the tax and user rate base over the long-term. Importantly, the City's ongoing review of asset management policies will allow staff to continue to monitor and implement mitigating measures should the program become less financially sustainable.

#### **B. Long-Term Capital and Operating Impacts**

The City has incurred increased operating costs since the infrastructure in SWM Area W-2 was constructed. Increases in user rate revenues associated with new development offset operating costs. The financial plan analysis indicates that the City's SWM rates have been structured to align with current and anticipated operating expenditures. Importantly, Council is required to review and adopt operating budgets on an annual basis which ensures the financial sustainability of the program.